

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

REC-100
OCT 01 2001
File Information Unit

In re Application of

Publication of
Pavley et al.

Application Number

06/852,831

Filed

4/15/86

Group Art Unit

Examiner

Paper No.

Assistant Commissioner for Patents
Washington, DC 20231

I hereby request access under 37 CFR 1.14(a)(3)(iv) to the application file record of the above-identified ABANDONED application, which is: (CHECK ONE):

4 952,913 column

I hereby request a second ~~first~~ identified ABANDONED application, which is: (CHECK ONE):
 (A) referred to in United States Patent Number 4,952,913 column _____

____ (B) referred to in an application that is open to public inspection as set forth in 37 CFR 1.11, i.e.,
Application No. _____, filed _____, on page _____ of
paper number _____.

_____ (C) an application that claims the benefit of the filing date of an application that is open to public inspection, i.e., Application No. _____ filed _____ or _____

— (D) an application in which the applicant has filed an authorization to lay open the complete application to the public.

Please direct any correspondence concerning this request to the following address:

Signature _____ Date 10/01/01

Signature

Signature
LARRY BECKMAN

Typed or printed name

FOR FTO USE ONLY

Approved by:

Animals

צו

F-6-4

[54] TAC FOR USE WITH PERSONNEL MONITORING SYSTEM

[75] Inventors: James D. Pauley, Estes Park; Allen E. Ripingill, Jr., Louisville, both of Colo.

[73] Assignee: B. I. Incorporated, Boulder, Colo.

[21] Appl. No.: 446,212

[22] Filed: Dec. 4, 1989

Related U.S. Application Data

[63] Continuation of Ser. No. 231,822, Aug. 12, 1988, Pat. No. 4,885,571, which is a continuation of Ser. No. 852,831, Apr. 15, 1986, abandoned.

[51] Int. Cl.³ G08B 23/00; H04B 1/34

[52] U.S. Cl. 340/573; 340/514; 340/825.49; 455/100

[58] Field of Search 340/572-576, 340/514-516, 539, 825.49; 455/100

[56] References Cited

U.S. PATENT DOCUMENTS

3,478,344	11/1969	Schwitzgebel	340/512
3,882,277	5/1975	DePedro	179/2 DP
3,898,984	8/1975	Mandel	128/2.1 A
4,259,665	3/1981	Manning	340/575
4,285,146	8/1981	Charles et al.	40/21 C
4,578,539	5/1986	Townsing	379/97
4,598,275	7/1986	Ross et al.	340/573
4,622,544	11/1986	Bially et al.	340/573 X
4,665,387	5/1987	Cooper et al.	340/572
4,682,155	7/1987	Shirley	340/573
4,747,120	5/1988	Foley	379/38
4,885,571	12/1989	Pauley et al.	340/573

FOREIGN PATENT DOCUMENTS

2141006A 12/1984 United Kingdom

OTHER PUBLICATIONS

A. K. Schmidt, "Electronic Monitoring Equipment", NJ Reports, Feb. 28, 1986.

"Judge Orders House Arrest"; LA Times; 11 Sep. 1985; Part I, p. 3.

"State to Test Electronic Home Jail"; Albuquerque Journal; 9 Mar. 1983; pp. A-1, A-3.

"Electronic Handcuff Keeps Tabs . . ."; The Cregonian; 10 Mar. 1983; p. B-12.

"Computer-Age Ball & Chain"; Arizona Republic; 13 Mar. 1983.

"Electronic Handcuffs . . ."; Houston Chronical; 11 Mar. 1983.

"Big Brother . . . Test Program"; Albuquerque Tribune; 9 Mar. 1983; p. A-3.

(List continued on next page.)

Primary Examiner—Joseph A. Orsino

Assistant Examiner—Thomas J. Mullen, Jr.

Attorney, Agent, or Firm—Fitch, Even, Tabin & Flannery

[57]

ABSTRACT

A tag for use with an individual monitoring system. The tag is worn by an individual being monitored, preferably on the ankle or leg where it can be concealed by the clothing of the individual. The tag is fully self contained and sealed. The circuits of the tag periodically generate an identification signal that includes an identification code. The identification signal modulates a stable RF signal that is transmitted in bursts of data words to a receiver associated with a field monitoring device (FMD) located at the monitoring location. In turn, the FMD may randomly establish communication with a central processing unit (CPU) located at a central monitoring location. Other information is included in the identification code of the tag, such as information indicating that an attempt has been made to remove the tag from the individual. The tag is held in place near the skin of it's wearer by a conductive strap that wraps around the leg or other limb of the individual. Two capacitive electrodes, one of which is realized with the conductive strap, function as the plates of a capacitor, with the body flesh serving as the dielectric material therebetween. By monitoring an alternating signal coupled from one capacitive electrode to the other, a determination can be made as to whether the tag has remained near the body flesh. Further, because the strap is conductive, a signal can be passed therethrough and a determination can be made as to whether the strap has been broken.

11 Claims, 6 Drawing Sheets

